	Agreed Terms for U.S. Patent No. 5,459,857			
Claim No(s).	Claim No(s). Claim Term Agreed Construction or Identification			
11	"means for writing said received stream of data	This term is subject to 35 U.S.C. § 112, ¶ 6.		
	records and redundancy data associated with said received stream of data records in said selected	The <u>function</u> is: writing said received stream of data records and redundancy data associated with said received stream of data records in said selected available memory space in said one redundancy group.		
	available memory space in said one redundancy group"	The corresponding <u>structure</u> is (1) a "storage control unit" including a "cluster control" and (2) a "disk controller"		
11	"means, interconnecting sad two data storage subsystems, for exchanging control and data signals"	This term is subject to 35 U.S.C. § 112, ¶ 6.  The <u>function</u> is: exchanging control and data signals.  The corresponding <u>structure</u> is "a data link."		
12	"means for writing said received stream of data records and redundancy data associated with said received stream of data records in said selected available memory space in said one redundancy group"	This term is subject to 35 U.S.C. § 112, ¶ 6.  The <u>function</u> is: writing said received stream of data records and redundancy data associated w said received stream of data records in said selected available memory space in said one redundancy group.  The corresponding <u>structure</u> is (1) a "storage control unit" including a "cluster control" and (2) "disk controller"		
14	"means, responsive to a failure of said selected redundancy group, for presenting a device not operational status to said host processor"	This term is subject to 35 U.S.C. § 112, ¶ 6.  The function is: responsive to a failure of said selected redundancy group, presenting a device not operational status to said host processor.  The corresponding structure is a "data storage subsystem."		

	Disputed Terms for U.S. Patent No. 5,459,857			
Claim No(s).	Claim Term	NetApp's Proposed Construction and Supporting Evidence	Sun's Proposed Construction and Supporting Evidence	
11	"means, responsive to the receipt of a stream of data records from said data processor and designated by said data process for storage in available	The parties agree this term is subject to 35 U.S.C. The parties agree that the corresponding structur control." The parties disagree on function. The proposed The function is: responsive to the receipt of a	e is a "storage control unit" including a "cluster functions are identified below:  Function: for selecting available memory space in	
	memory space in said data storage subsystem, for selecting available memory space in one of said redundancy groups to store said received stream of data records thereon"	stream of data records from said data processor and designated by said data process for storage in available memory space in said data storage subsystem, selecting available memory space in one of said redundancy groups to store said received stream of data records thereon.  INTRINSIC EVIDENCE  • See 5:20-6:31; Figs. 1-3 and accompanying text.	one of said redundancy groups to store said received stream of data records thereon  EVIDENCE:  Intrinsic evidence supporting Sun's construction may be found, for example, at col. 4:26-54; col. 5:20-6:32; col. 11:20-12:40; and/or in Figures 1, 2 and/or 6; and claim 11.  Testimony by Sun's expert, Dr. Smith, concerning the meaning of this term to one of skill in the art in the context of its use in the '857	
		<ul> <li>EXTRINSIC EVIDENCE</li> <li>Dr. Greg Ganger may testify concerning the meaning of this term to one of skill in the art in the context of its use in the '857 patent.</li> <li>NetApp reserves the right to rely on any evidence identified by Sun</li> </ul>	patent.  • Sun reserves the right to rely on any evidence identified by NetApp.	
11	"means for maintaining data indicative of the physical location of data records stored in said plurality of redundancy	The parties agree this term is subject to 35 U.S.C. The parties agree that the function is: maintainin records stored in said plurality of redundancy ground The parties disagree on structure. The proposed	g data indicative of the physical location of data ups.	

	Disputed Terms for U.S. Patent No. 5,459,857			
Claim No(s).	Claim Term	NetApp's Proposed Construction and Supporting Evidence	Sun's Proposed Construction and Supporting Evidence	
	groups"	The corresponding structure is (1) "storage control unit" including a cache memory and (2) a "virtual track directory"	Structure: cache memory 512  EVIDENCE:  • Intrinsic evidence supporting Sun's	
		<ul> <li>INTRINSIC EVIDENCE</li> <li>See 5:20-6:31; 7:63-8:41; Figs. 1-3 and 7 and accompanying text.</li> </ul>	construction may be found, for example, at col. 5:44-6:32; col. 7:63-8:41; claim 11; and/or in Figures 2 and/or 3.  • Testimony by Sun's expert, Dr. Smith,	
		<ul> <li>EXTRINSIC EVIDENCE</li> <li>Dr. Greg Ganger may testify concerning the meaning of this term to one of skill in the art</li> </ul>	concerning the meaning of this term to one of skill in the art in the context of its use in the '857 patent.	
		<ul> <li>in the context of its use in the '857 patent.</li> <li>NetApp reserves the right to rely on any evidence identified by Sun.</li> </ul>	• Sun reserves the right to rely on any evidence identified by NetApp.	
"means, connected to said exchanging means and responsive to writing a data record to one of said		The parties agree this term is subject to 35 U.S.C	C. § 112, ¶ 6.  The proposed functions and structures are identifie	
	redundancy groups, for transmitting said written data record to the other of	The function is: responsive to writing a data record to one redundancy groups, transmitting said written data record to the other of two data	Function: transmitting said written data record to the other of said two data storage subsystems	
	said two data storage subsystems"	storage subsystems. The corresponding structure is a "storage control unit" including a "cluster control" with an "IDI circuit."	Structure: data link 106, storage control unit 105 107  EVIDENCE:	
		<ul> <li>INTRINSIC EVIDENCE</li> <li>See 11:62-66; Figs. 2 and 3 and accompanying text.</li> </ul>	<ul> <li>Testimony by Sun's expert, Dr. Smith, concerning the meaning of this term to one of skill in the art in the context of its use in the '857 patent.</li> <li>Sun reserves the right to rely on any evidence</li> </ul>	

	Disputed Terms for U.S. Patent No. 5,459,857				
Claim No(s).	Claim Term	NetApp's Proposed Construction and Supporting Evidence	Sun's Proposed Construction and Supporting Evidence		
		<ul> <li>EXTRINSIC EVIDENCE</li> <li>Dr. Greg Ganger may testify concerning the meaning of this term to one of skill in the art in the context of its use in the '857 patent.</li> <li>NetApp reserves the right to rely on any evidence identified by Sun.</li> </ul>	identified by NetApp.		
12	"means responsive to said data record being received from said exchanging means, for selecting available memory space in	The parties agree this term is subject to 35 U.S.C. The parties agree the corresponding structure is control." The parties disagree on function. The proposed	a "storage control unit" including a "cluster		
	one of said redundancy groups to store said received stream of data records thereon"	The <u>function</u> is: responsive to a data record being received from said exchanging means, selecting available memory space in one of said redundancy groups to store said received stream of data.	Function: selecting available memory space in one of said redundancy groups to store said received stream of data records thereon		
		<ul> <li>INTRINSIC EVIDENCE</li> <li>See 5:20-6:31; Figs. 1-3 and accompanying text.</li> </ul>	<b>EVIDENCE:</b> ■ Testimony by Sun's expert, Dr. Smith, concerning the meaning of this term to one of skill in the art in the context of its use in the '857 patent.		
		EXTRINSIC EVIDENCE     Dr. Greg Ganger may testify concerning the meaning of this term to one of skill in the art in the context of its use in the '857 patent.	• Sun reserves the right to rely on any evidence identified by NetApp.		
		NetApp reserves the right to rely on any evidence identified by Sun.			

Disputed Terms for U.S. Patent No. 5,459,857			
Claim No(s).	Claim Term	NetApp's Proposed Construction and Supporting Evidence	Sun's Proposed Construction and Supporting Evidence
13	"means, responsive to said data processor requesting said data storage subsystem to read a data record from a selected redundancy group, for reading said maintained data to identify the physical storage location of said requested data record in said plurality of disk drives that comprise said selected redundancy group"	The parties agree this term is subject to 35 U.S.C. The parties agree the corresponding structure is a The parties disagree on function. The proposed The function is: responsive to said data processor requesting said data storage subsystem to read a data record from a selected redundancy group, reading said maintained data to identify the physical storage location of said requested data record in said plurality of disk drives that comprise said selected redundancy group.  INTRINSIC EVIDENCE  See 12:29-40.  EXTRINSIC EVIDENCE  Dr. Greg Ganger may testify concerning the meaning of this term to one of skill in the art in the context of its use in the '857 patent.  NetApp reserves the right to rely on any evidence identified by Sun.	C. § 112, ¶ 6. a "storage control unit."
6	"in response to writing a data record to said one redundancy group" /"responsive to writing a data record to one of said redundancy groups"	PROPOSED CONSTRUCTION: The event takes place after and in reaction to the writing of a data record to a single redundancy group.  INTRINSIC EVIDENCE  • See 1:8-10; 2:65-3:38; 3:59-4:23; 6:5-32; 7:18-26; 9:59-10:58; 12:3-22; Figs 1-3 and	PROPOSED CONSTRUCTION: "in response to writing the data record to memory associated with the one redundancy group" / "responsive to writing the data record to memory associated with one of the redundancy groups"  EVIDENCE:

Supporting Evidence  6 and accompanying text; Claims 23, 24, 26, 28, 29, 30, 31, 32, 34, 35, 36, 37, 40, 42, 43, 45, 46, 48, 50, 51, 52, 53, 54; Apr. 21, 1995 Information Disclosure Statement at 4.  EXTRINSIC EVIDENCE  • Dr. Greg Ganger may testify concerning the meaning of this term to one of skill in the art in the context of its use in the '857 patent.  • NetApp reserves the right to rely on any evidence identified by Sun.  PROPOSED CONSTRUCTION: Data that maps address information from a processor to	<ul> <li>12:13.</li> <li>Testimony by Sun's expert, Dr. Smith, concerning the meaning of this term to one of skill in the art in the context of its use in the '857 patent.</li> <li>Sun reserves the right to rely on any evidence</li> </ul>
maps address information from a processor to	
the physical location of data on disk.  INTRINSIC EVIDENCE  • See 2:12-15; 7:64-8:41; 12:23-40; Fig. 7 and accompanying text; May 5, 1992 Information Disclosure Statement at 2-3.  EXTRINSIC EVIDENCE  • Dr. Greg Ganger may testify concerning the meaning of this term to one of skill in the art in the context of its use in the '857 patent.	the phrase is clear on its face. However, if the Court decides the construe this phrase, the phrase should be construed to mean: "data that describes the location of data records on disk" / "data that describes the location of the requested data on disk."  EVIDENCE:  Testimony by Sun's expert, Dr. Smith,
	<ul> <li>Information Disclosure Statement at 2-3.</li> <li>EXTRINSIC EVIDENCE</li> <li>Dr. Greg Ganger may testify concerning the meaning of this term to one of skill in the art</li> </ul>

	Disputed Terms for U.S. Patent No. 5,459,857				
Claim No(s).	Claim Term	NetApp's Proposed Construction and Supporting Evidence	Sun's Proposed Construction and Supporting Evidence		
6, 7, 11, 12	"stream of data records"	PROPOSED CONSTRUCTION: A contiguous group of data records received from a processor.  INTRINSIC EVIDENCE  • See 9:57-10:14.  EXTRINSIC EVIDENCE  • Dr. Greg Ganger may testify concerning the meaning of this term to one of skill in the art in the context of its use in the '857 patent.  • NetApp reserves the right to rely on any evidence identified by Sun.	PROPOSED CONSTRUCTION: "a transmission of data records"  EVIDENCE: • stream: (1) to send data from one device to another. (2) see data stream. IBM DICTIONARY OF COMPUTING (1994), p.654. • data stream: (1) All information (data and control commands) send over a data link usually in a single read or write operation. IBM DICTIONARY OF COMPUTING (1994), p. 177. • data stream: data that is flowing from one point to another in a network. A data stream usually consists of a succession of messages (or data blocks). MCGRAW-HILL DATA COMMUNICATIONS DICTIONARY (1993), p. 20. • Testimony by Sun's expert, Dr. Smith, concerning the meaning of this term to one of skill in the art in the context of its use in the '857 patent. • Sun reserves the right to rely on any evidence identified by NetApp.		
6, 11	"fault tolerant"	PROPOSED CONSTRUCTION: The ability of a computer system to continue to operate correctly even though one or more of its component parts are malfunctioning.  INTRINSIC EVIDENCE  • See 2:36-43; 4:55-5:19; Figs. 1-2 and 8 and	PROPOSED CONSTRUCTION: Sun contends this term does not require construction because the term is clear on its face. However, if the Court decides the construe this term, the term should be construed to mean: "data processor can recover from a failure of one data storage subsystem by accessing a duplicate		

	Disputed Terms for U.S. Patent No. 5,459,857			
Claim No(s).	Claim Term	NetApp's Proposed Construction and Supporting Evidence	Sun's Proposed Construction and Supporting Evidence	
		<ul> <li>EXTRINSIC EVIDENCE</li> <li>Donald D. Spencer, The Illustrated         Computer Dictionary (1986) fault tolerance         Capability of a system to perform its         functions in accordance with design         specifications, even in the presence of         hardware or software failures. If, in the         event of faults, the system functions can be         performed but do not meet the design         specifications with respect to the time         required to complete the job or the storage         capacity required for the job, the system is         said to be partially or quasi fault-tolerant.         Provided by the application of protective         reliability, these resources may consist of         more hardware, software, time, or a         combination of all three.</li> <li>Dr. Greg Ganger may testify concerning the         meaning of this term to one of skill in the art         in the context of its use in the '857 patent.</li> <li>NetApp reserves the right to rely on any         evidence identified by Sun.</li> </ul>	copy of a data record in another data storage subsystem."  EVIDENCE: • fault tolerant: pertaining to a system or component that is able to continue normal operation despite the presence of faults. THE IEEE STANDARD DICTIONARY OF ELECTRICAL AND ELECTRONICS TERMS, SIXTH ED. (IEEE Std 100-1996), p.395. • Testimony by Sun's expert, Dr. Smith, concerning the meaning of this term to one of skill in the art in the context of its use in the '857 patent. • Sun reserves the right to rely on any evidence identified by NetApp.	
6, 11	"to maintain duplicate data records in both said data storage subsystems"	PROPOSED CONSTRUCTION: each data storage subsystem contains a copy of a virtual device image and data records stored in the other data storage subsystem.	PROPOSED CONSTRUCTION: Sun contends this phrase does not require construction because the phrase is clear on its face. However, if the Court decides the construe this phrase, the phrase should be construed to mean:	

	Disputed Terms for U.S. Patent No. 5,459,857			
Claim No(s).	Claim Term	NetApp's Proposed Construction and Supporting Evidence	Sun's Proposed Construction and Supporting Evidence	
		<ul> <li>INTRINSIC EVIDENCE         <ul> <li>See Abstract, 2:19-33; 3:25-37; 4:38-54; 10:59-12:40; Fig. 5 and accompanying text; May 5 1992 Information Disclosure Statement at 2-3.</li> </ul> </li> <li>EXTRINSIC EVIDENCE         <ul> <li>Dr. Greg Ganger may testify concerning the meaning of this term to one of skill in the art in the context of its use in the '857 patent.</li> </ul> </li> <li>NetApp reserves the right to rely on any evidence identified by Sun.</li> </ul>	"each data storage subsystem contains a copy of data records in the other data storage subsystem."  EVIDENCE:  Testimony by Sun's expert, Dr. Smith, concerning the meaning of this term to one of skill in the art in the context of its use in the '857 patent.  Sun reserves the right to rely on any evidence identified by NetApp.	
6, 11	"in response to the receipt of a stream of data records from said data processor"/"responsive to the receipt of a stream of data records from said data processor"	<ul> <li>PROPOSED CONSTRUCTION: The event takes place after and in reaction to the receipt of data records from a processor.</li> <li>INTRINSIC EVIDENCE         <ul> <li>See 9:59-10:57; see also Intrinsic evidence for "in response to writing a data record to said one redundancy group"</li> </ul> </li> <li>EXTRINSIC EVIDENCE         <ul> <li>Dr. Greg Ganger may testify concerning the meaning of this term to one of skill in the art in the context of its use in the '857 patent.</li> </ul> </li> <li>NetApp reserves the right to rely on any evidence identified by Sun.</li> </ul>	PROPOSED CONSTRUCTION: Sun contends this phrase does not require construction because the phrase is clear on its face.  EVIDENCE: '857 Patent, col. 4:39-50; Figure 6; 11:54-12:13.  • Testimony by Sun's expert, Dr. Smith, concerning the meaning of this term to one of skill in the art in the context of its use in the '857 patent.  • Sun reserves the right to rely on any evidence identified by NetApp.	

Disputed Terms for U.S. Patent No. 5,459,857				
Claim No(s).	Claim Term	NetApp's Proposed Construction and Supporting Evidence	Sun's Proposed Construction and Supporting Evidence	
14	"said host processor"	<ul> <li>PROPOSED CONSTRUCTION: This term is indefinite.</li> <li>EXTRINSIC EVIDENCE</li> <li>Dr. Greg Ganger may testify concerning the meaning of this term to one of skill in the art in the context of its use in the '857 patent.</li> <li>NetApp reserves the right to rely on any evidence identified by Sun.</li> </ul>	PROPOSED CONSTRUCTION: "said data processor"  EVIDENCE:  Testimony by Sun's expert, Dr. Smith, concerning the meaning of this term to one of skill in the art in the context of its use in the '857 patent.  Sun reserves the right to rely on any evidence identified by NetApp.	